

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. MO-0129518

Owner: Holcim (US) Inc.
Address: 2942 U.S. Highway 61, Bloomsdale, MO 63627

Continuing Authority: Same as above
Address: Same as above

Facility Name: Holcim, Lee Island Project
Address: 2942 U.S. Highway 61, Bloomsdale, MO 63627

Legal Description: See page 2

Receiving Stream: See page 2

First Classified Stream and ID: See page 2

USGS Basin & Sub-watershed No.: See page 2

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

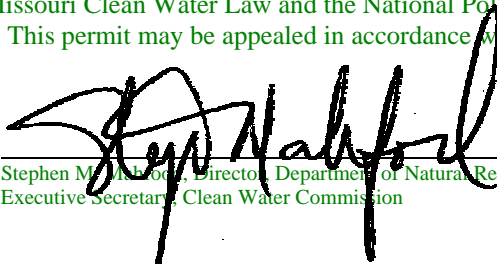
FACILITY DESCRIPTION

See page 2

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

January 23, 2004
Effective Date

January 22, 2009
Expiration Date


Stephen M. Mahood, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

Jim Hull, Director, Water Pollution Control Program

FACILITY DESCRIPTION (continued)

Outfall: #001 Raddy Hollow (Limestone Mining Settling Basin and drainage from Access Road)

SW $\frac{1}{4}$, NE $\frac{1}{4}$, Sec. 9, T39N, R7E, Ste. Genevieve County
(a portion was previously under General Permit MO-G490778)
Settling basin/storm water runoff.
Receiving Stream: Isle du Bois Creek
First Classified Stream and ID: Isle du Bois Creek (P) 01734
USGS Basin & Sub-watershed No.: 07140101-230001
Design flow is 24.0 MGD (based on 10-year/24 hr event)
Actual Flow dependent on rainfall.

Outfall: #002 (Cement Plant Site Settling Basin and drainage from Access Road)

SE $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 4, T39N, R7E, Ste. Genevieve County
Settling basin/storm water runoff.
Receiving Stream: Isle du Bois Creek
First Classified Stream and ID: Isle du Bois Creek (P) 01734
USGS Basin & Sub-watershed No.: 07140101-230001
Design flow is 10.0 MGD (based on 10 year/24 hr event)
Actual Flow dependent on rainfall.

Outfall: #003 (Harbor Recycle Water Settling Basin and Fill Site)

SW $\frac{1}{4}$, NE $\frac{1}{4}$, Sec. 10, T39N, R7E, Ste. Genevieve
(this outfall receives drainage from both the North and South Old Quarry Hollows)
Settling basin/storm water runoff.
Receiving Stream: Mississippi River
First Classified Stream and ID: Mississippi River (P) 01707
USGS Basin & Sub-watershed No.: 07140101-230001
Design flow is 19.44 MGD (based on 10-year/24 hr event)
Actual Flow dependent on rainfall.

Outfall: #004 (Harbor Construction)

SE $\frac{1}{4}$, SW $\frac{1}{4}$, Sec. 3, T39N, R7E, Ste. Genevieve
(this outfall encompasses the general area of the harbor site)
Storm water runoff controlled through BMPs.
Receiving Stream: Mississippi River
First Classified Stream and ID: Mississippi River (P) 01707
USGS Basin & Sub-watershed No.: 07140101-230001
Design flow is 5.07 MGD (based on 10-year/24 hr event)
Actual Flow dependent on rainfall.

Outfall: #005 (Topsoil Storage Area and drainage from Access Road)

NW $\frac{1}{4}$, NW $\frac{1}{4}$, Sec. 16, T39N, R7E, Ste. Genevieve
Storm water runoff controlled by BMPs.
Receiving Stream: Tributary to Isle du Bois Creek
First Classified Stream and ID: Isle du Bois Creek (P) 01734
USGS Basin & Sub-watershed No.: 07140101-230001
Design flow is 5.97 MGD (based on 10-year/24 hr event)
Actual Flow dependent on rainfall.

					PAGE NUMBER 3 of 7	
A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PERMIT NUMBER MO-0129518	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. Two additional outfalls are listed requiring best management practices for stormwater control. The final effluent limitations shall become effective upon issuance and remain in effect until construction of the settling basins is complete (See Special Condition 11). Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	CONSTRUCTION EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001, 002, 003</u> (Note 1)						
Flow	MGD	*		*	once/quarter**	24 hr. estimate
Settleable Solids	ml/L/hr	1.5		1.0	once/quarter**	grab
pH - Units	SU	***		***	once/quarter**	grab
Precipitation	inches/day	****		****	once/day	24 hr. total
Oil and Grease	mg/L	15		10	once/quarter**	grab
<u>Outfall #001, 002, 003, 004 and 005</u> (Note 2)						
Chloride *****	mg/L	*		*	once/year	
Site Inspection*****					once/quarter	
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>April 28, 2004</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

					PAGE NUMBER 4 of 7	
A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PERMIT NUMBER MO-0129518	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. Two additional outfalls are listed requiring best management practices for stormwater control. The final effluent limitations shall become effective upon completion of construction of the settling basins and shall remain in effect until expiration of this permit. (See Special Condition 11). Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL OPERATION EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001, 002, 003</u> (Note 1)						
Flow	MGD	*		*	once/quarter**	24 hr. estimate
Total Suspended Solids	mg/L	75		50	once/quarter**	grab
pH - Units	SU	***		***	once/quarter**	grab
Precipitation	inches/day	****		****	once/day	24 hr. total
Oil and Grease	mg/L	15		10	once/quarter**	grab
<u>Outfall #001, 002, 003, 004 and 005</u> (Note 2)						
Chloride*****	mg/L	*		*	once/year	grab
Site Inspection*****					once/quarter	
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>April 28, 2004</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Part I</u> STANDARD CONDITIONS DATED <u>October 1, 1980</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- * Monitoring requirement only.
- ** Once/quarter when a discharge occurs and samples must be collected at least one (1) hour after and prior to two (2) hours after a 0.5 inch rainfall event. If a discharge does not occur during the report period, then the permittee will report "no discharge".
- *** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- **** Permittee shall maintain a precipitation event log for the permitted site. The log shall include the amount and duration of precipitation. A summary sheet showing all events shall be submitted with the Quarterly Discharge Monitoring Report.
- ***** One sample shall be taken at Outfalls 002 and 005 when the first discharge occurs following the use of deicing chemicals on the access road or plant site.
- ***** The Permittee shall conduct at least a quarterly inspection of the Harbor Construction and Topsoil Storage Area to determine the effectiveness of the BMPs prescribed by the SWPPP developed for these sites and make any necessary changes in the SWPPP to comply with the terms of Special Condition C.7 of this permit.

Note 1 - Effluent limits are based on a design sufficient to provide adequate treatment for storm water resulting from a rainfall (design storm) equal to or less than a one (1) in ten (10) year/twenty-four (24) hour event. Holcim (US) Inc. shall be responsible for ensuring all discharges comply with the limits contained in Table A that result from a design storm of this magnitude or less as measured at the site's rainfall monitoring station.

Note 2 - See Special Condition #10.

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.
2. All outfalls must be clearly marked in the field.

C. SPECIAL CONDITIONS (continued)

3. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.

4. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant discharged under this permit, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:

- (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
- (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
- (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
- (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
- (e) There shall be no significant human health hazard from incidental contact with the water;
- (f) There shall be no acute toxicity to livestock or wildlife watering;
- (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
- (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

5. Good housekeeping practices shall be maintained on the site to keep solid waste from entry into waters of the state.

6. All fueling facilities present on the site shall adhere to applicable federal and state regulations concerning underground storage, above ground storage, and dispensers, including spill prevention, control and counter measures.

7. Substances regulated by federal law under the Resource Conservation and Recovery Act (RCRA) or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) that are transported, stored, or used for maintenance, cleaning or repair shall be managed according to the provisions of RCRA and CERCLA.

8. Staff of the permitted facility shall inspect any structures that function to prevent pollution of storm water or to remove pollutants from storm water and of the facility in general to ensure that any Best Management Practices are continually implemented and effective.

C. SPECIAL CONDITIONS (continued)

9. All paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) shall be stored so that these materials are not exposed to storm water. Sufficient practices of spill prevention, control, and/or management shall be provided to prevent any spills of these pollutants from entering a water of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
10. The holder of this permit must develop and implement a Storm Water Pollution Prevention Plan (SWPPP) that reduces pollution from the Topsoil Storage Area, Harbor Construction Area, and Access Road, and that
 - a. Incorporates required practices identified below,
 - b. Incorporates erosion control practices specific to site conditions, and
 - c. Provides for maintenance and adherence to the plan.

Before removing any site vegetation or disturbing earth, the permittee shall develop a SWPPP that is specific to the land disturbance activities at the site. This plan must be developed within three (3) months of the issuance of this permit. However, the plan should not be submitted to the department unless specifically requested.

The permittee shall fully implement the provisions of the SWPPP required under this part as a condition of this permit throughout the term of the land disturbance project.

The purpose of the SWPPP is to ensure the design, implementation, management, and maintenance of Best Management Practices (BMPs) in order to reduce the amount of sediment and other pollutants in storm water discharges associated with the land disturbance activities during construction of the Topsoil Storage Area and Harbor Construction Area; comply with the Missouri Water Quality Standards; and ensure compliance with the terms and conditions of this permit.

The permittee shall select, install, use, operate, and maintain the BMPs in accordance with the concepts and methods described in the following documents:

- a. ***Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices***, (Document number EPA 832-R-92-005) published by the United States Environmental Protection Agency (USEPA) in 1992. **This manual is available at The USEPA Internet site:**
http://cfpubl.epa.gov/npdes/pubs.cfm?program_id=0 (searching under Publications/Policy and Guidance Documents).
- b. ***Protecting Water Quality: A field guide to erosion, sediment and storm water best management practices for development sites in Missouri***, published by the Missouri Department of Natural Resources in November 1995.

The permittee is not limited to the use of these guidance manuals. Other commonly accepted publications may be used for guidance and must be referenced in the SWPPP if used. In addition, the permittee is not limited to the use of BMPs identified in these manuals. However, any alternative BMPs should be justified by site conditions and described in the SWPPP.

11. Holcim (US), Inc. shall notify the department once construction of each settling basin is complete by submitting an engineer's certification of completion of construction. Each outfall below a completed basin shall begin meeting the limits contained in Table A on Page 4 of 7 upon department's notification to Holcim (US), Inc. that the engineer's certification has been accepted.